(Effective 7/16/99)

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE WORK PACKAGE REVISION REQUEST

Page 1 of 2

	D WORK PACKAGE SERIAL NUN NTROL NO.	MBER: <u>SWP-RFCSS-00002-00</u> REVISION NO. <u>1.0</u>
	TITLE: RECONNAISSA	NCE LEVEL CHARACTERIZATION
		TED CHANGE(S): ADD STEPS TO INCLUDE "COUPON" DIFY JHIT/JHA FOR "COUPON" SAMPLING
Originator:	Steve Luker Name REQUE	ST DISPOSITION:
	X Request Approved	Request Disapproved
Reason for Disar	pproval:	
Planner:	Paul A. Wojtaszek	Jan Augustus 3/4/00
		YCURRENCE:
	onai review, i agree that the Work describ	ed in this package meets technical requirements under my cognizance and
can be performed s		
can be performed s Responsible: Organization		Signature James / 3-z7-00
Responsible:	safely. Marla Broussard	1 20 for mos 1 3-27-00
Responsible: Organization	safely. Marla Broussard Name Brian Maria	Signature Signature Signature Date Date
Responsible: Organization H&S:	Marla Broussard Name Brian Maria Name NAME	Signature Signature Jack Ja
Responsible: Organization H&S: Engineering:	Marla Broussard Name Brian Maria Name Name Name Name Name Name	Signature 3/15/80 Date Date Date
Responsible: Organization H&S: Engineering: Rad Safety:	Marla Broussard Name Brian Maria Name N/A Name Rick Roberts N/A	Signature 3/15/80 Date
Responsible: Organization H&S: Engineering: Rad Safety: Crit Safety:	Marla Broussard Name Brian Maria Name N/A Name Rick Roberts Name N/A Name N/A Name	Signature Signature Signature Date Date Date Signature Date Date Date
Responsible: Organization H&S: Engineering: Rad Safety: Crit Safety: Nuc Safety:	Marla Broussard Name Brian Maria Name N/A Name Rick Roberts Name N/A Name N/A Name N/A Name N/A Name N/A Name N/A Name Marcia Murdock	Signature Signature Signature Date Date Date Signature Date Date Date
Responsible: Organization H&S: Engineering: Rad Safety: Crit Safety: Nuc Safety: Environmental:	Marla Broussard Name Brian Maria Name N/A Name Rick Roberts Name N/A Name	
Responsible: Organization H&S: Engineering: Rad Safety: Crit Safety: Nuc Safety: Environmental: Fire Protection:	Marla Broussard Name Brian Maria Name N/A Name Rick Roberts Name N/A Name N/A Name Marcia Murdock Name N/A Name Mark Brooks	Signature Signature Signature Date

NOV 2000 RECEIVED RECORDS CENTER.

ADMIN RECCRD

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE WORK PACKAGE REVISION REQUEST

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WORK CO	NTROL NO.		REVISION NO.	·	
If SWP used for To	S&R work, signature ind	APPRO		n repair activities ha	ave been clearly
Responsible: Manager (Rep)	Name	SWP USE AUTE	Signature	/	Date
Use of this Standar must be started wit Responsible: Manager (Rep)	rd Work Package (SWP) hin 90 calendar days.	is authorized for the wo	rk specified by the Wor Who was an armonic of the Work of the Wor	k Control Form con	tained herein. Work
	personal review of in this package has		nd inspection of the	e work site, all o	f the work and
Job Supervisor:	Name		Signature	· /	Date
Engineering:	Name Name		Signature		Date
Quality	$\frac{2}{N_{\text{Name}}}$	LUKERI	Fight Signature		7/00 Date
Responsible: Manager (Rep)	M.C. Brown	Scard , -	PPROVAL: MOL <u>Noussau</u> Signature	<u>, , , , , , , , , , , , , , , , , , , </u>	1/1/00 Date

Section 2 Table of Contents / List of Effective Pages

Section	Title	Pages	Rev
1	Work Package Cover Sheet	1	0
2	Table of Contents / List of Effective Pages	2	Ö
3	Work Control Form	3	0
4	Work Package Change Log	4	0
5	List of Required Drawings and References	5	0
6	Bill of Materials	6	0
7	List of Special Equipment, Materials, and PPE	7	0
8	Initial Conditions and Prerequisites	8	0
9	Specific Task Instructions	11	0
10	Post Maintenance Test (PMT) Requirements	19	0

Appendices

Appendix

- Appendix 1 Job Hazard Analysis (JHA), Activity Screen Form (ASF), Health & Safety Plan, MSDS's.
- Appendix 2 Status Log
- Appendix 3 Miscellaneous and Field Generated Paperwork.

- Appendix 4 Pre-evolutionary Briefing Forms and Pre-ev Record Keeping.

 Appendix 5 Work Package Re-Start Pre-Requisites

 Appendix 6 Respiratory Protection On-The -Job Verification Work Sheet.
- Appendix 7 Post Job Review Form and Instructions.
- Appendix 8 Characterization Package.
- Appendix 9 Additional Concurrence Signatures.

Work Control Number:

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Rev 1.0

Section 3

WCF

Pages 3a & 3b

Section 4 Work Package Change Log

EVISION NO.	SECTION NO./ APPENDIX NO.	DESCRIPTION
4.19. Lace	GENERAL	LATEST LIST OF GROUPS B+C TRAVERS/AUGS TO DE CHARACTERISTO
		FOR FREE ZELENSE VIA the ZLC PROCESS
		GRAP B GRAP C
		7881 B. 8987
		7883 A 733(A/ 7883 B 777(D
		7439 AO (4) 7130 E
		8575 T903 A
		7/2
		THIS STANDED WERE PACKED HAS ITS FALLOWING ASSOCIATED
		WORK CONTROL #5
		A (T0102734 N (T0102832
		10 0 T0102836 6 C T0102837
		T0103087 T0102838 6
1/1/00	General	Due to elevated Rad levels on Roof of B331A.
<u>u., [] [] </u>		2 (two) coupon samples will be taken on
		6/1/00. See attached Punch 11st date 5/31/00
		for specific information regarding this task.
		ax Caullax -518395
/ /		
6/27/00		AGRESTICS GRACIME LIGHT BALLACE "SIGN-CET" SHEETS WITHING
6/27/00		ASSESTED MARRIAG LICHT BALLAS "SIEN-OFF" SHEETS WITHIN
6/27/00		the CHARGETER FERTION PROMPER WILL NOT BE ALTERNATION
6/27/00		in NEWTON BUTCH BY GRAPHS of the STRUFTCE
6/27/00		the CHARGETER FANTON PACEAGE WILL NOT BE ALTERNACIONED
6/27/00		in NEWTON BUTCH BY GRAPHS of the STRUFTCE
6/27/00		LE CHRRETERITATION PROMPER WILL NOT BE ALMOSTICATED IN INPUIDIAL BURG, BUT BY GRAPING & the STREIFIC LIST PROVIDED BELOW: ASTRESOS INSTRUTUM ASTRESOS SUMIES PCB/BURG MARC, GRE B GRE C GR B GREC GR B GRP C
6/27/00		LE CHARACTER/BATION PACESAGE WILL NOT BE ALMERTICATED IN INPULIONAL BURG BURGE BY GRAPING & THE STRUCK LIST PROVIDED BELOW: ASPESSOS INSPECTION ASPESSOS SUMILES PLB/BALLET MERCE, GRE B GRE C CRP 3 GRE C GR B GRP C T881 4 B331 A T883 A T803 A T803 A
6/27/00		LE CHRRETERIENTEN PROMPER WILL NOT BE ALMOSTICATED IN INFLUENCE BURGE WILL NOT BE ALMOSTICATED LIST PROVIDED BELOW: ASSESSOS INSTECTION ASSESSOS SUMIES PCB BOLLES MARCE, GRE B GRE C GRE B GRE GRE CT GRE BETTE TESTA B331A T883A T803A T883A T331A T883B T750E
6/27/00	- A-	LE CHRECTER TENTON PACES WILL NOT BE ALMOSTICATED IN INPULIAL BURG BULL BY GRAPING & the STREETIC LIST PROVIDED BELOW: ASPESOS INSTECTION ASPESSOS SUMMES POBLEMENT MERC. GRE B GRP C GRP B GRP C GRP B GRP C TRUIT BUILD TOBBA TOBBA
6/27/00	A	LE CHRECTER/BRIDAN PACKAGE WILL NOT BE ALMOSTICATED LIST PROVIDED BELOW: ASPESSOS INSPECTION ASSESSOS SUMMES PLB/BALLET MERCE, GRE B GRE C CRP B GRE C GR B GRP C T8814 B3314 T8834 T8034 T8834 T3314 T8838 T750E T8834 T3314 T8838 T750E T8834 T331 T8838 T750E
6/27/00	, , , , , , , , , , , , , , , , , , ,	LE CHRRICTER/BATION PROMPER WILL NOT BE ALMOSTICATED (MARKET) (M
6/27/00	A SIGNED	LE CHRRICTER/BRIDAN PACKAGE WILL NOT BE ALMOSTICATED LIST PROVIDED BELLEY: ASPESSOS INSPECTION ASPESSOS SUMMES PCB/BALLEY MARCE, GRP B GRP C GRP B GRP C GRP B GRP C T881A B331A T883A T803A T883A T331A T883B T750E T883B T711D T883B T750E T883A T331A T883B T750E T883A T331A T883B T750E T883A T331A T331A T883B T710D T883B T730A

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5/31/00

Punch List for Sampling of 331A Rooftop

IWCP – SWP-RFCSS-00002-00 REV. ((2 g//2000) pen and ink via Al Helmick/MCB address change log section in IWCP obtain & maintain logbook (see Lukers box(s))

POD Randy

Equipment - Ladder/Drill/Bit/Sample containers (3 or 4) 250 ML Wide Mouth Glass, custody seals, RAM Transfer tags etc.

Conduct and document tail-gate safety meeting address spotter for ladder, wind, ladder footing and angle etc.

do not attempt to go on the roof, Collect samples from ladder.

Identify locations on roof to sample, E Mckamey

Tom Szydlowski setting up new Rin and events for this because we could not tack onto the last project for unclear reasons. Luker needs to talk w/Tom S. on this. I asked for 3 events/samples (expect only 2 are required)

Joe Bianconi and Luker need to communicate on Oasis method (MDA, count times etc) and when samples will be getting to 771.

Maintain Chain of Custody from samplers to Bianconi X7262. Tom S., X8165 will provide the COC Form to Luker.

Hard Hats, Steel toes, Safety Glasses w/sides, DOE's

Good Luck and page me after noon if you need.

Also, verify charge number NG2200C1, valid?



Section 5 List of Required Drawings and References

Performance References

Ref/Draw No	<u>Description</u>	<u>Issue Date</u>
PRO-563-ACPR	Asbestos Characterization Procedure	09/01/99
PRO-476-RSP-16.02	Radiological Surveys of Surfaces and Structures	09/30/99
33-PRO-165-RSP-16.03	Radiological Sampling of Building Media	09/30/99

Developmental References

Ref/Draw No	Discription	Issue Date
29CFR 1926.32(f)	Occupational Safety and Health Standards	02-01-99
29CFR 1926.1101(k)(5)ii	Occupational Safety and Health Standards	02-01-99
29CFR 1926.1101(g)	Occupational Safety and Health Standards	02-01-99
3-PRO-165-RSP-07.02	Contamination Monitoring Requirements	02-17-98
MAN-077-DDCP	Decontamination & Decommissioning Characterization Protocol	11-20-98
MAN-066-COOP	Site Conduct of Operations Manual	09-15-98
3-PRO-141-RSP-09.01	Unrestricted Release of Property, Material, Equipment, and Waste	03-31-99
RM-06.02	Records Identification, Generation, and Transmittal	05-28-97
2-S47-ER-ADM-05.14	Use of Field Log Books and Forms	06-05-95
RMRS -QAPD-001	RMRS Quality Assurance Program Description	09-13-99
4-SOI-ENV-OPSF0.03	Field Decontamination Operations	02-16-95
RMRS/OPS-PRO.112	Handling of Decontamination Water and Wash Water	12-30-98
1-PRO-079-WGI-001	Waste Characterization, Generation, and Packaging	11-03-97
1-N07-HSP-7.03	Breathing Air	11-02-98
1-F13-HSP-7.05	Hearing Conservation	09-25-97
MAN-071-IWCP	Integrated Work Control Manual, Re∨ 1, Chg 1	11-30-97
MAN-072-OS&IH PM	Chapter 19: Asbestos Management Program	9-30-98
MAN-072-OS&IH PM	Chapter 28: Chronic Beryllium Disease Prevention Program	5-24-99
MAN-072-OS&IH PM	Chapter 29: Eye and Face Protection Program	11-30-98
MAN-072-OS&IH PM	Chapter 30: Foot Protection	11-30-98
MAN-072-OS&IH PM	Chapter 31: Respiratory Protection Selection	11-30-98
MAN-072-OS&IH PM	Chapter 33: Hearing Conservation Program	03-15-99
MAN-072-OS&IH PM	Chapter 34: Head Protection	11-30-98
MAN-072-OS&IH PM	Chapter 39: Ladder Safety	11-30-98
MAN-072-OS&IH PM	Chapter 40: Scaffolds	11-30-98
MAN-072-OS&IH PM	Chapter 41: Work Platforms	03-02-99
MAN-072-OS&IH PM	Chapter 42: Fall Protection and Equipment	11-30-98
RF/RMRS-98-284	Generic Health & Safety Plan for Characterization Sampling	01-99
RF/RMRS-DC-06.01	Document Control Program	05-28-97

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SECTION 6

BILL OF MATERIALS (BOM)

NOTE

MATERIAL ACQUISITION IS NOT SCHEDULED / REQUIRED FOR THIS PROCEDURE.

Section 7 Special Tools, Materials and Personnel Protective Equipment

7.0 SPECIAL TOOLS AND MATERIALS

7.1 TOOL / MATERIAL DESCRIPTION

NOTE

THE NE ELECTRA INSTRUMENT WILL BE USED TO PERFORM ALPHA SCANS. ADDITIONAL SURVEY EQUIPMENT APPROVED FOR USE AT RFETS MAY BE USED AS AUTHORIZED BY RADIOLOGICAL ENGINEERING. REFERENCE THE CHARACTERIZATION PLAN (CONTAINED IN APPENDIX 6 OF THIS WORK PACKAGE) FOR INSTRUMENTATION USAGE.

- (1) Ladders
- (2) Sharpie (marking pens)
- (3) Whatman 41, 4.7 cm filter papers
- (4) NE Electra
- (5) Cordless electric drill with coring bit
- (6) Chisel
- (7) Sheet metal snips
- (8) Sample jars

NOTE

THE FOLLOWING PPE IS DEFINED AS THE MINIMUM USAGE FOR TRAILER SURVEYS.

ADDITIONAL PPE MAY BE ADDED AND DOCUMENTED AT ANY TIME AS NECESSARY. NOTE: SUBSTITUTIONS SHALL NOT BE MADE WITHOUT INDUSTRIAL HYGIENE CONCURRENCE.

7.2 **PPE**

7.2.1 SUBCONTRACTOR



Initiate site safety compliance by implementing personnel usage of the following PPE as appropriate:

- (1) Safety glasses with side shield (ANSI Z87.1 approved).
- (2) Hard Hat (ANSI Z98.1). Bump Cap (RMRS OPS/DIR-019) is authorized if work area is not posted as specifically requiring hard hat.
- (3) Approved above ankle leather boots, with ANSI Z41.1 approved safety toecaps.
- (4) Leather Gloves

Section 8 Initial Conditions and Prerequisites

<u>PURPOSE</u>: This standard work package provides instructions for radiological sampling and surveys, asbestos inspection and sampling, and inspection of fluorescent light ballasts for purposes of reconnaissance-level characterization or MARSSIM release.

SCOPE: Conduct radiological surveys, asbestos inspection and sampling, and inspection of fluorescent light ballasts

8.1 PRECAUTIONS AND LIMITATIONS

- 8.1.1 Advise Workers that if any discrepancies, difficulities or hazards are encountered that cannot be safely resolved within the scope of work, <u>STOP WORK</u>, and immediately inform supervisory personnel. Note: Stop work is in accordance to RMRS Directive 1. Restart will be authorized by the RMRS Vice President or designee.
- 8.1.2 Develop / update A Job Hazard Analysis (JHA) based on the results of a Job Hazard Identification Tool (JHIT) walkdown as required in MAN-071-IWCP, Chapter 3. Place the completed JHA in Appendix 1.
- 8.1.3 Dispose of all waste in accordance with 1-P73-HSP-18.10 that includes requirements established by 3-PRO-141-RSP-09.01 "Unrestricted Release of Property, Material, Equipment and Waste", 3-PRO-088-RSP-09.02 "Radioactive Material Transfer and Shipment", and 3-PRO-140-RSP-09.03 "Unrestricted Release of Bulk or Volume Material". Comply with 1-PR0-079-WGI-001 "Waste Generation Instructions", as required and insert authorized instructions in Appendix 3 (titled: Miscellaneous & Field Generated Paperwork).
- 8.1.4 All records generated by this project will become part of the project history file as well as the Administrative Record as applicable.
- 8.1.5 Beware of wasps, nests, snakes and other wildlife that may be in the area. If wildlife cannot be avoided, THEN, contact and request site Ecology to investigate and authorize the continuation of the trailer radiological surveys as required. Call Ecology at x3764, Pager (303) 212-3167, Field Radio Individual #3787, and / or Field Radio Channel EMAD 12.
- 8.1.6 Check-off blocks (☐) are used for steps that do not require a signature. A <u>check</u> (√) or <u>initial</u> signifies completion.
- 8.1.7 Read the required reading materials prior to initiating work, and sign off the required reading checklist.

NOTE

IF A STEP OR TECHNICAL STATEMENT IS DECLARED NOT APPLICABLE (N/A) BY THE DESIGNATED CONTRACTOR FIELD SUPERVISOR AND / OR SITE ENVIRONMENTAL ENGINEERING REP, MARK "N/A" IN THE SIGNATURE SPACE OR CHECK-OFF BLOCK, WITH INITIALS, EMPLOYEE NUMBER, AND DATE OF ENTRY. RECORD THE REASON FOR THE N/A IN STATUS LOG IN APPENDIX 2.

8.2 **PRELIMINARY ACTIONS**

NOTE ACTIONS CAN BE PERFORMED OUT OF SEQUENCE EXCEPT AS SPECIFICALLY NOTED.

8.2.1 FIELD SUPERVISOR

Verify that all personnel are trained and qualified to perform tasks as specified in Work Sequence Instructions. Review for Ladder training and Fall Protection training as specified for this work package.

8.2.2 FIELD SUPERVISOR

Place and log all current and applicable material MSDSs in Appendix 3. Advise all workers where MSDSs are located for access as required. (N/A if not required).

Section 8 **Initial Conditions and Prerequisites**

8.2.3	FIELD SUPERVISOR Initiate POD Evolutionary Request Forms for tasks contained in the Characterization Package contained in Appendix 8, and submit to the Plan of the Week representative.
8.3	SITE PREPARATION
	NOTE ACTIONS CAN BE PERFORMED OUT OF SEQUENCE EXCEPT AS SPECIFICALLY NOTED.
8.3.1	FIELD SUPERVISOR Arrange work site setup of instruments, tools and materials. Review the JHA contained in Appendix 1 and comply with safety issues and potential hazard controls as required for site preparation.
8.3.2	FIELD SUPERVISOR Inspect / verify previously established measurement locations identified by griding on floors, walls and ceilings and roofs. In units where griding is not practical, view labels or similar methods used. Signoff as a preliminary for work start. FIELD SUPERVISOR N.S. DEMOS Name Signature Date
8.4	APPROVALS AND NOTIFICATIONS
8.4.1	FIELD SUPERVISOR Notify the following organizations a minimum of 24 hours prior to their services being required:
(1)	Radiological Operations
(2)	Industrial Health and Safety
(3)	Radiological Engineering
	NOTE PRE-EVOLUTION BRIEFINGS MAY BE CONDUCTED AS A PRELIMINARY TO ALL BUILDING SURVEY SAMPLING ANALYSIS PROCESSES INDIVIDUALLY OR COLLECTIVELY. CHANGES IN PERSONNEL AND TASK INSTRUCTIONS REQUIRES NEW PRE-EVOLUTION BRIEFINGS PRIOR TO WORK START.

Conduct pre-evolution briefings and Job Task Review (Safe Work Checklist) per MAN-066-COOP and RMRS OPS-DIR-016. Document pre-evolutionary briefing forms contained in Appendix 4. Briefings shall include all workers (applicable personnel) and be performed prior to the start of any / all work tasks to include site preparation activities.

FIELD SUPERVISOR

Date

Section 9

	Specific Task Instructions
9.1	PERMISSION TO START WORK
9.1.1	RESPONSIBLE MANAGER All Initial Conditions, Prerequisites and Site Preparations are complete and permission is given to start work on radiological sampling and surveys, asbestos inspection and sampling and duorescent light ballast inspection. RESP MANAGER // S. Domos Name Signature Date
	WARNING WORK AREAS ARE SUBJECT TO HAVING NESTS OF STINGING INSECTS, HIGH ENTRANCE ACCESSES AND POTENTIAL EXPOSURE TO LOOSE EQUIPMENT AND MATERIALS. THE JHA CONTAINED IN APPENDIX 1 PROVIDES SPECIFIC HAZARDS AND REQUIRED CONTROLS. ENSURE COMPLIANCE WITH THE JHA.
	NOTE THE CHARACTERIZATION PACKAGE WITH SPECIFIC SURVEY INSTRUCTIONS CONTAINED IN APPENDIX 8 IS THE PRIMARY PROCEDURAL AND METHODOLOGY REFERENCE FOR RADIOLOGICAL SURVEYS AND SAMPLING AS REFERENCED IN THIS IWCP STANDARD WORK PACKAGE. CONDUCT OF WORK WILL BE IN ACCORDANCE WITH THE APPENDIX 8 CHARACTERIZATION INSTRUCTIONS. SECTION 9 WILL CONTAIN CHECKOFFS FOR THE COMPLETION OF EACH CHARACTERIZATION SURVEY.
Γ	NOTE
	ACTIONS CAN BE PERFORMED OUT OF SEQUENCE EXCEPT AS SPECIFICALLY NOTED.
9.2	<u>TASKS</u>
9.2.1	RCT Conduct radiological surveys and analysis processes in accordance with Characterization Package task instructions contained in Appendix 8.
9.2.2	Conduct asbestos inspection and sampling in accordance with Characterization Package task instructions contained in Appendix 8.
9.2.3	Site electrician or field personnel Inspect all fluorescent light fixtures for PCB-containing ballasts in accordance with Characterization Package task instructions contained in Appendix 8.
9.2.4	Sampling technician Conduct radiological sampling utilizing tin snips, chisel, cordless drill, or other appropriate tool in accordance with Characterization Package task instructions contained in Appendix 8.
9.3	TASK COMPLETION
9.3.1	FIELD SUPERVISOR / RAD ENGINEER All work tasks as indicated in Section 9 are completed satisfactorily in accordance with the Characterization Package and specified site procedures.
	FIELD SUPERVISOR N. S. DEMOS J. 4-6-00 Name Name Signature Date UKIR-DO
	CRAPTIONES TOUCH MCKAMPY S. O. M. M. WIR-DO

Name

Section 10 **Post Maintenance Testing Instructions**

PURPOSE: This section is for work package closure only. All survey, sampling and analysis process

requirements were satisified in Section 9. PRECAUTIONS AND LIMITATIONS 10,1 10.1.1 NONE **PREREQUISITES** 10.2 10.2.1 NONE 10.3 POST SURVEY, SAMPLING TESTING 10.3.1 NONE

SYSTEM / AREA RESTORATION & WORK PACKAGE COMPLETION 10.4

RCT / RAD ENG / RAD OPS 10.4.1 Complete post job contamination surveys per Radiological Safety Practices for area, equipment and tools for release. Post or depost areas as applicable. (N/A if not applicable).

FIELD SUPERVISOR 10.4.2

Perform the following:

Ensure that all permits, forms, checklist, logs and reports are complete and returned to the appropriate organization or department.

Ensure all work areas are cleaned at least to the level of cleanliness prior to work start.

APPENDIX 3.2 - JOB HAZAR DENTIFICATION TOOL (JHIT)

Specific Work Location: Is any electrical, incchanical, pythaulic, or chemical chargy, either stored or active, and will workers be placed at risk of conducting hazardous energy sources? A will have be done on an energized electric circuit? A workers be placed at risk of conducting hazardous energy sources? A will work be done on an energized electric circuit? A workers be placed by a work by a confined space or an area that is a supported confined A workers be placed by a work by a confined space or an area that is a supported confined A workers by a work by a wo	<u>₩</u>	WCF No.:	Title/Description: RECONNAISSANCE LEVEL CHARACTERIZATION, REV. 1	RACTE	UZATI	JN, RI	3V. 1				Õ	Date: 03/14/00	/14/00		
sany electrical, mechanical, pydraulic, or chemical energy, either stored or active, available to energize the tiern being replaced or serviced, and will workers be placed at lists of constitutions energy sources? 2 Will work be done on an energized electric cientif? x x x x x x x x x x x x x x x x x x	Sp	cific Work Location:							SAF	ETY S	MEIN	MOL	VEM	ENT	
1 samy electrical, mechanical, hydramic, or deminal catergy, either stored or active, 2 Willi work be done on an arragized betactic circuit? 3 paces for sake involve work in a confined space or an area that is a suspected confined X X X X X X X X X X X X X X X X X X				Yes	No	P			-	Ь.	Qual	CRIT	NS	ENV	FP
2 Will work be done on an energized electric circuit? 3 Doos the task involve work in a confined space or an area that is a suspected confined 4 Space? 4 Space? 5 Space? 5 Space? 5 Space? 5 Space? 5 Space? 5 Space? 6 Space? 7 Space? 8 Space? 8 Space? 9 Will the work activity likely to result in an inhalation or dermal exposure to dust, mists, X X X X X X X X X X X X X X X X X X		Is any electrical, mechanical, hy available to energize the item be risk of contacting hazardous energing	traulic, or chemical energy, either stored or active, ing repaired or serviced, and will workers be placed at gy sources?		×	×	×	C R¹							
Does the task involve work in a contined space or an area that is a suspected contined A blow ork activity likely to result in an inhalation or dermal exposure to dust, mists, A blow ork activity likely to result in an inhalation or dermal exposure to the dust, mists, A blow of the activity likely to result in the use of a respirator or protective clothing? X	7	Will work be done on an energiz	ed electric circuit?		×	X	X	C							
4 Is the work activity likely to result in an inhalation or dermal exposure to dust, mists, wapons, gassa, of fulners that may require the use of a respirator or protective clothing? Does the activity require the use of themicals, or are chemicals present in the work area or to be brought into the area? If "NOO" that proceed to questional the exposed to toxic or corrosive chemicals? Will the worker's eyes or skin potentially be exposed to toxic or corrosive chemicals? Will the activity result in the generation of waste chemicals? Will the activity result in the generation of waste chemicals? Will the activity result in the generation of waste chemicals? Will the activity result in the generation of waste chemicals? Will the activity result in the generation of waste chemicals? Will activitie activity result in any be immediately dangerous to life and unchancedrated noise exposure? Could workers be exposate of environments that may be immediately dangerous to life and health or chemicals for which any purity ing respiratory protection is inadequate (e.g., methylene chloride, nitric actid, carbon monoxide, carbon dioxide, or other oxygen Mill abstractor containing material (ACM) or possible asbestos defined any expension to be used? Will worker be exposed to falling objects (e.g., construction area)? Are pressure vessels, systems and relief devices? That are not protected by compliant pressure devices? Will work to include movement of negative in the vicinity of the work warea that are not protected by compliant pressure devices? This is hoisting and rigging equipment to be used? Will lower than proceed to question #13. Will lower to include movement of negative in the vicinity of the work area will are an or protected by compliant pressure devices? Will lower to include movement of negative processing the vicinity of the work area will that are not procee	3	Does the task involve work in a space?	confined space or an area that is a suspected confined		×	×	X	R							R
Does the activity require the use of chemicals, or are chemicals present in the work area or for bought into the area? Will the worker's eyes or skin potentially be exposed to toxic or corrosive chemicals? Will the worker's eyes or skin potentially be exposed to toxic or corrosive chemicals? Will the activity result in the generation of waste chemicals? Will the activity result in the generation of waste chemicals? Will the activity result in the generation of waste chemicals? Will the activity result in the generation of waste chemicals? Will the activity result in the generation of waste chemicals? Could workers be exposed to entricomments that may be immediately dangerous to life and health or chemicals for which air purifying respiratory protection is inadequate (e.g., methylathe chlorica, intric acid, carbon monoxide, carbon dioxide, or other oxygen deficient atmospheres)? Will asbestos containing material (ACM) or possible asbestos containing material (ACM) be disturbed? Will asbestos containing material (ACM) or possible asbestos containing material (ACM) be disturbed? Will worker be exposed to falling objects (e.g., construction area)? Are pressure vessels, systems to be used? Are pressure vessels, systems and relief devices included in the work scope, or is there exposure to pressurized vessels other than gas cylinders in the vicinity of the work area was to protected by compliant pressure devices? Is swork to include movement of material, lools, or equipment? Is a powered industrial truck (forklift) to be used? Will rolls as movered industrial truck (forklift) to be used? Will rolls as powered industrial truck (forklift) to be used? Will rolls as powered industrial movement accessories be a specific roll of the processure vessels, and the processure of generation #13. The properties of the processure of generation #13. The properties of the processure of generation #13. The problem of the processure of generation #13. The problem of the processure of generation #14. The problem	4	Is the work activity likely to rest vapors, gases, or fumes that may	It in an inhalation or dermal exposure to dust, mists, require the use of a respirator or protective clothing?		×										
Will the worker's eyes or skin potentially be exposed to toxic or corrosive chemicals? Will the activity result in the generation of waste chemicals? Sharper Sh	S.	Does the activity require the use to be brought into the area? If "NO", then proceed to quest	of chemicals, or are chemicals present in the work area or ion #6.		×		×	D .							
6 Is the activity result in the generation of waste chemicals? 6 Is the area posted as a high noise area or will the work activities result in an uncharacterized noise exposure? Could workers be exposed to environments that may be immediately dangerous to life and health or chemicals for which air purifying respiratory protection is inadequate (e.g., methylene chloride, niric acid, carbon monoxide, carbon dioxide, or other oxygen deficient atmospheres)? 8 Will asbestos containing material (ACM) or possible asbestos containing area (ACM) or possible asbestos containing material (ACM) or possible asbestos containing or possible asbestos and that are not protected by compliant pressure devices? 10 Are pressured by compliant pressure devices? 11 Is a now to include movement of material movement accessories be asbestos and a substance of question at the vicinity of the work scope, or is there are a powered industrial truck (forklift) to be used? 12 Is a powered industrial truck (forklift) to be u	5a		potentially be exposed to toxic or corrosive chemicals?		×		X	၁							
In the area posted as a high noise area or will the work activities result in an aucharacterized noise exposure? Could workers be exposed to environments that may be immediately dangerous to life and networkers be exposed to environments that may be immediately dangerous to life and networkers be exposed to environments that may be immediately dangerous to life and deficient almospheres? Reflicient almospheres? Will asbestos containing material (ACM) or possible asbestos asbestos asbestos and relief devices included in the work scope, or is there exposed to find a possible asbestos and relief devices? X X X X C C C C C C C C C C C C C	જ		eneration of waste chemicals?		X		X	C						R	
Could workers be exposed to environments that may be immediately dangerous to life and health or chemicals for which air purifying respiratory protection is inadequate (e.g., methylene chloride, ultric acid, carbon monoxide, carbon dioxide, or other oxygen deficient atmospheres)? Referent atmospheres)? Will absets containing material (ACM) or possible asbestos containing material (ACM) or quipment? Are pressure vessels, systems and relief devices included in the work scope, or is there that are not protected by compliant pressure devices? Is work to include movement of material, tools, or equipment? Is work to include movement to be used? Is a powered industrial truck (forklift) to be used? Will rollers (multi-tons), lift tables, jacks, or other material movement accessories be well as a powered industrial truck (forklift) to be used? Will rollers (multi-tons), lift tables, jacks, or other material movement accessories be well as a powered industrial truck (forklift) to be used? Will rollers (multi-tons), lift tables, jacks, or other material movement accessories be well as a powered industrial truck (forklift) to be used? Contained to the compression of the material movement accessories be well as a powered industrial truck (forklift) to be used? Contained to the compression of the material movement accessories be well as a powered industrial truck (forklift) to be used? Contained to the compression of the material movement accessories be well as a powered industrial truck (forklift) to be u		Is the area posted as a high noix uncharacterized noise exposure?	area or will the work activities result in an		×										
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Will worker be exposed to falling objects (e.g., construction area)? Are compressed gas cylinders or systems to be used? Are pressure vessels, systems and relief devices included in the work scope, or is there exposure to pressurized vessels other than gas cylinders in the vicinity of the work area that are not protected by compliant pressure devices? Is work to include movement of material, tools, or equipment? If "NO", then proceed to question #13. Is hoisting and rigging equipment to be used? Is a powered industrial truck (forklift) to be used? Will rollers (multi-tons), lift tables, jacks, or other material movement accessories be used?	∞	Will asbestos containing materia (PACM) be disturbed?	d (ACM) or possible asbestos containing material	х		X					R			В	
Are pressure vessels, systems and relief devices included in the work scope, or is there exposure vessels, systems and relief devices included in the work area that are not protected by compliant pressure devices? Is work to include movement of material, tools, or equipment? Is work to include movement to be used? Is hoisting and rigging equipment to be used? Is a powered industrial truck (forklift) to be used? Is a powered industrial truck (forklift) to be used? Will rollers (multi-tons), lift tables, jacks, or other material movement accessories be used?	6	-	g objects (e.g., construction area)?	х				C							
Are pressure vessels, systems and relief devices included in the work scope, or is there exposure to pressurized vessels other than gas cylinders in the vicinity of the work area that are not protected by compliant pressure devices? Is work to include movement of material, tools, or equipment? If "NO", then proceed to question #13. Is hoisting and rigging equipment to be used? Is hoisting and rigging equipment to be used? Is a powered industrial truck (forklift) to be used? Is a powered industrial truck (forklift) to be used? Will rollers (multi-tons), lift tables, jacks, or other material movement accessories be well.	10		systems to be used?		Х		X	C						8	
Is work to include movement of material, tools, or equipment? If "NO", then proceed to question #13. Is hoisting and rigging equipment to be used? Is a powered industrial truck (forklift) to be used? Will rollers (multi-tons), lift tables, jacks, or other material movement accessories be used? X X X X X X X C C C			d relief devices included in the work scope, or is there other than gas cylinders in the vicinity of the work area not pressure devices?		X		X)							
Is hoisting and rigging equipment to be used? Is a powered industrial truck (forklift) to be used? Will rollers (multi-tons), lift tables, jacks, or other material movement accessories be with the constant of the constan	12		material, tools, or equipment?		X										
Is a powered industrial truck (forklift) to be used? Will rollers (multi-tons), lift tables, jacks, or other material movement accessories be X X X X X C C C	12		nent to be used?		Х	X	_				R				
Will rollers (multi-tons), lift tables, jacks, or other material movement accessories be X	12		forklift) to be used?		Х	X			၁		Ж				
	12		ibles, jacks, or other material movement accessories be		×			C	၁					,	•

P = Checklist or Permit Required / T = Training Required / M = Medical Monitoring

R = Required SME Involvement & Work Document Concurrence / R¹ = Required for High Planning Level Activities / R² = Required for Uncharacterized Noise Exposure /

R³ = Required when welding is performed to verify conformance in accordance with the Site Quality Assurance Program. /R4= As required by activity and determined by planning team

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APPENDIX 3.2 – JOB HAZAKA DENTIFICATION TOOL (JHIT)

13 15 15 15 17 17 17 17 17	WCI	WCF No.:	Title/Description: RECONNAISSANCE LEVEL CHARACTERIZATION, REV. 1	ACTER	ZATIC	N, R	.V. 1					Date:3/14/00	00/1		
set producing work, to include welding, cutting and/or brazing to P pre-approved designated welding cutting and/or brazing to P pre-approved designated welding area? The effect of question and control of the worked on a certain and or the work of the work is being the work is the work is being the work is bein	Spec	ific Work Location:								SME	INVO	LVEM	ENT		
15 start, Henre, or the producting welfing area? 16 start, Henre or the producting welfing area? 17 start, Henre or the producting welfing area? 18 start, Henre or the producting welfing area? 18 start, Henre or the producting welfing, culting, and/or brazing, to a contaminated with either fixed or removable randometrie material, grd does the work a contaminated with either great bear an individed this start. Henre or head producting work, to include welfing, culting, and/or brazing, to a contaminated with either fixed or removable randometrie material, grd does the work of the production work, to include welfing, culting, and/or brazing, to a contaminated with either fixed or removable randometries and with the presentation and the presentation of the production of				Yes	N	P	T	Н	\vdash	-	-	CRIT	SN	ENV	FP
13 Containing or buzzone is to be performed, is the material to be worked on a surface or area have a material to the beardone and is the performed. So the material work of the containing of with eight of removable radioactive material, gg does the work for the surface or area have a material substitution at a Nicyle pre-suptance during but work are benylium contaminated or area have benylium containinated, will work as eater a benylium operations area, or is there a potential benylium inhalation X X X X X X X X X X X X X X X X X X	13	Is spark, flame, or heat producing wo occur outside a NS/FP pre-approved If "NO", then proceed to question #	ork, to include welding, cutting and/or brazing to designated welding area?		X	X	X			,	R³				C
surface or area than a nationalizable listicator, and the same and containing the work area beryllium contaminated or a national fame, or best producing work, to include welding, cutting, and/or hexaring, to cocur in a nuckear facility, other than in a NSFP pre-approved designated welding area is beryllium to be hadded, are surfaces in the work area beryllium contaminated or a limited access beryllium operations area, or a postulate and perations area, or a solution of the surface in the work area beryllium operations area or a limited access beryllium operations area, or a postulate in postulate in a nuckear in the surface in the work activities? 15 Is work to be performed on denotities being out, sarabed, sanded or melted? 16 Are lead or class containing producits being out, sarabed, sanded or melted? 17 Is work to be performed on bittatics? 18 Are lead or class containing producits being out, sarabed, sanded or melted? 19 Does the activity involve maintenance of a ventilation system or ducting where a future 10 produce box was vented and the potential for an explosion may exist due to residual 21 Invilla the activity involve elevated work? 22 Invilla the activity involve elevated work? 23 Invilla the activity involve elevated work? 24 Invilla the activity involve elevated work? 25 International producits being or a post of the sand of the use of force to 26 International producits being or activity involve a combination of the competation between equired? 27 Are approxime box making an extension of the use of force to 28 Are approxime box making an extensive producity and/or the use of force to 29 Are approxime box making an extensive producity and/or the use of force to 20 Are approxime box making an extensive producity and/or the use of force to 21 Are approxime the activity involve a combination of the competation of the competation at sold? 21 Are approxime the activity involve a combination of the competation of the competation at sold? 22 Are approxime the activity involve a combinat	13a	If welding, cutting or brazing is to contaminated with either fixed or r	be performed, is the material to be worked on emovable radioactive material, or does the work		Х	×	×		7)	R					•
18 Seyek, flame, or healt producing work, to include welding, entiring, and/or brazing, to occor in an arother feelily, other than in a NSFP pre-approved designated welfing area x x x x x x x x x x x x x x x x x x		surface or area have a radiological	history?												
Exposure during the work area beaylium contaminated or superced to be beryllium or the handled, are surfaces in the work area beaylium organizations area or superced to be beryllium organizations care, or is there a potential beryllium inhalation exposure during the work activities? Is work to be performed on batteries? Are lead of ordanizing products being cut, scraped, sanded or melted? Are caplosives to be handled? Are caplosives to be handled by not a caplosion may exist due to residual mod or glove box was vented and the potential for an explosion may exist due to residual caplosion may exist due to residual will an eachished and marked exit or egress route be blocked while work is being work in the activity involve elevated work? Will the activity involve elevated work? If wor, then proceed to question \$2. Is sall protection required? Is sall protection required? Is an actal work platform to be used? Are prinching hazards present? (i.e., does the activity involve a combination of the combination of the combination activity and the work platform to complete the task?) Are prinching working in awkward postures, repetitive motion, and/or the use of force to complete the task? Do temperature extremes exist?	136	Is spark, flame, or heat producing occur in a nuclear facility, other the (e.g., machine shop)?	work, to include welding, cutting, and/or brazing, to an in a NS/FP pre-approved designated welding area	-	X	X			()	၁			၁		၁
15 Swork to be performed on domestic (potable) water lines? 15 Are bead or lead containing products being cut, saraped, sanded or method? 17 Are bead containing products being cut, saraped, sanded or method? 18 Are bead containing products being cut, saraped, sanded or method? 18 Are bead containing products being cut, saraped, sanded or method? 18 Are beat-bead containing products being cut, saraped, sanded or method? 18 Are ergonomic beat-beat-beat-beat-beat-beat-beat-beat-		Is beryllium to be handled, are surfac suspected to be beryllium contaminat a limited access beryllium operations exposure during the work activities?	es in the work area beryllium contaminated or ted, will workers enter a beryllium operations area or area, or is there a potential beryllium inhalation		×	X	×		~:		ပ			၁	
16 Are lead or lead containing products being cut, scraped, sanded or melted? X X X X X X X X X		Is work to be performed on domestic	(potable) water lines?		X						R				
Is work to be performed on batteries? Are explosives to be handled? Does the activity involve maintenance of a vertilation system or ducting where a finne hood or glove box was verted and the potential for an explosion may exist due to residual perchlocates? Will an established and marked exit or egress route be blocked while work is being performed or glove box was verted and the potential for an explosion may exist due to residual perchlocates? Will an established and marked exit or egress route be blocked while work is being performed to question #22. Will ladders be used for this work? If "NO", then proceed to question #22. Will ladders be used for this work? Is fall procein required? Is fall work being performed on a roof? Are pinching hazards and/or sharp edges present? Are pinching hazards and/or sharp edges present? Are pinching hazards break present? Are pinching hazards and/or sharp edges present? Are pinching hazards present? Are pinching hazards present? Are pinching hazards and/or sharp edges present? Are pinching hazards and/or sharp edges present? Are pinching and work being present? Are pinching hazards and/or sharp edges present? Are pinching hazards and/or sharp edges present? Are pinching hazards and/or sharp edges present? Are pinching hazards present? Are procesured to the and the activity involve a combination of the following working in a wkward postures, repetit	<u> </u>	Are lead or lead containing products	being cut, scraped, sanded or melted?		Х		X		R					R	
Are explosives to be handled? Does the activity involve maintenance of a ventilation system or ducting where a fume perchlorates? Will an established and marked exit or egress route be blocked while work is being performed? Will an established and marked exit or egress route be blocked while work is being performed? Will the activity involve elevated work? Will the activity involve elevated work? Will an established and marked exit or egress route be blocked while work is being performed? Will the activity involve elevated work? Will the activity involve elevated work? Will an established and marked exit or egress route be blocked while work is being performed? Will ladders be used for this work? Is scaffolding required? Is an actial work platform to be used? Are pinching hazards and/or sharp edges present? Are pinching hazards present? Are pinching hazards present? Are regonomic bazards present?	17	Is work to be performed on batteries?	i		Х		X		(C)						
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Will an established and marked exit or egress route be blocked while work is being performed? Will the activity involve elevated work? If "NO", then proceed to question #22. Will ladders be used for this work? Is scaffolding required? Is scaffolding required? Is an aerial work platform to be used? Is the work being performed on a roof? Are pinching hazards present? Are ergonomic hazards present? (i.e., does the activity involve a combination of the following; working in awkward postures, repetitive motion, and/or the use of force to complete the task)? Will adders be used for this work? X X X X X X X X X X X X X	19	Does the activity involve maintenanc hood or glove box was vented and the perchlorates?	e of a ventilation system or ducting where a fume e potential for an explosion may exist due to residual		Х		×		~					∝	၁
Will the activity involve elevated work? X X X X C If "NO", then proceed to question #22. X X X C C Will ladders be used for this work? Is scaffolding required? X X X C C Is stall protection required? Is an aerial work platform to be used? X X X C C Is the work being performed on a roof? Are pinching hazards and/or sharp edges present? X X X C C Are ergonomic hazards present? Are ergonomic hazards present? X X X C C Are ergonomic hazards present? Are ergonomic hazards present? X X X C C Are ergonomic hazards present? X X X X X C C Are ergonomic hazards present? X X X X X C C C Are ergonomic hazards present? X X X X X X C C C C C C C C C <td< td=""><td>20</td><td>Will an established and marked exit performed?</td><td>or egress route be blocked while work is being</td><td></td><td>X</td><td>X</td><td></td><td></td><td>r)</td><td></td><td></td><td></td><td></td><td></td><td>R</td></td<>	20	Will an established and marked exit performed?	or egress route be blocked while work is being		X	X			r)						R
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Is an aerial work blatform to be used? Is the work being performed on a roof? Are pinching hazards and/or sharp edges present? Are ergonomic hazards present? (i.e., does the activity involve a combination of the following; working in awkward postures, repetitive motion, and/or the use of force to complete the task)? Do temperature extremes exist? X X X X X X X C C C	21c	Is fall protection required?		Х			X		C C				_		
Is the work being performed on a roof? Are pinching hazards and/or sharp edges present? Are ergonomic hazards present? (i.e., does the activity involve a combination of the following, working in awkward postures, repetitive motion, and/or the use of force to complete the task)? Do temperature extremes exist? X X C C C	21d	Is an aerial work platform to be us	ed?	X		X	X		C						
Are pinching hazards and/or sharp edges present? Are ergonomic hazards present? (i.e., does the activity involve a combination of the following; working in awkward postures, repetitive motion, and/or the use of force to complete the task)? Do temperature extremes exist?	21e	-	<u>P?</u>	X			X		C						
Are ergonomic hazards present? (i.e., does the activity involve a combination of the following; working in awkward postures, repetitive motion, and/or the use of force to complete the task)? Do temperature extremes exist? X R	22	Are pinching hazards and/or sharp ec	iges present?	X											
Do temperature extremes exist?	23	Are ergonomic hazards present? (i.e. following, working in awkward post complete the task)?		Х					~					ļ	
	24	Do temperature extremes exist?			×					<u>ည</u>					

P = Checklist or Permit Required / T = Training Required / M = Medical Monitoring
 R = Required SME Involvement & Work Document Concurrence / R¹ = Required for High Planning Level Activities / R² = Required for Uncharacterized Noise Exposure / R³ = Required when welding is performed to verify conformance in accordance with the Site Quality Assurance Program. /R4= As required by activity and determined by planning team
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APPENDIX 3.2 – JOB HAZARD DENTIFICATION TOOL (JHIT)

MC	WCF No.: Title/Description: RECONNAISSANCE LEVEL CHARACTERIZATION, REV. 1	ACTERIZ	ATION	,REV					<u> </u>	Date: 3/14/00	/14/00		
Spe	Specific Work Location:							SME	SME INVOLVEMENT	LVE	MENT	_	
		Yes	No]	P T	M	H&S	ENG	RAD	Qual.	CRIT	I NS	ENV	山田
25	Will the activity involve any penetrations into or through, walls, ceilings, floors, slabs, or pads or demolition of any of these? COUPON SAMPLING If "NO", then proceed to question #26.	X				2	R	R	R		R		Yerr vice
25a	Is the material being penetrated in a radiologically posted area or will the penetration protrude into a radiologically controlled area?		X X	х	X			R				C	
25b	Is there record, evidence or suspicion that the material being penetrated could have come in contact with radioactive material?	X	7	X	X			R					
25c	Has the surface of the material being penetrated been treated in any way such that absorbed contamination could be hidden (e.g., painted, scabbled, or other decon efforts)?		×	X	X			R					
25d	Will the activity involve any penetrations into a Material Access Area?		×					2			၁	_	
25e			×								~		
26	Does this activity involve a Configuration Change as defined by DES-210?		X				R	R	R	<u>ာ</u>	C		
27	Does the activity involve movement, interaction or removal of fissile material?		X	_	X	C		~		~	၁		
28	Are flammable/explosive gases involved in or required for the work in a nuclear facility, other than in an approved area (e.g., maintenance shop)?		×			ပ		ж			ບ		R
53	Is the work activity occurring within a building, structure, or area that currently has or previously had radioactive material? If "NO", then proceed to question #30.		×										
53a CHC			×	×	×			~					
29b	Is the work conducted in a posted Contamination Area (CA)?		X	×	X			ت ا					
29c	Is the work being conducted in a posted High Contamination Area (HCA)?		×	X	X			ద					
79d	Is the work conducted in a posted airborne contamination area?		×	X	×			~		_		<u>ت</u>	\dashv
29e	Has the area ever been designated as a radiological area?		×	X	X	\dashv	_	ت				၁	-
29f	Does the area's history indicate a past presence of radioactive materials or operations?		×	×	×			~					
29g	Is there a potential for the activity to release radioactive material to the air through mechanical, chemical or other means?		×	×				~				~	
29h	Does the area contain, or is it bounded by any radiological postings, barriers, signs or labels?		×	×	×			8				İ	
29i	Will the activity involve the transfer, pumping, or draining of radioactive or radioactively contaminated liquids?		×	×				R		υ U		C	
29j	Does the work activity involve equipment containing a sealed radioactive source or on equipment capable of generating radiation?		 ×	X	X			~					

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APPENDIX 3.2 – JOB HAZARD-DENTIFICATION TOOL (JHIT)

WCF No.:	Vo.: Intellescription: Kellonnaldsance level characterization, key. 1	71777		5	- -				<u> </u>	Date. 3/14/00	20/+1		
1.8	Specific Work Location:							SME	SME INVOLVEMENT	LVEM	ENT		
		Yes	No	P	T M	I H&S	S ENG	RAD	Qual.	CRIT	NS	ENA	단
29k	Does the work involve penetration into systems, or surfaces containing or suspected of containing radioactive materials or contamination?	×		Х	×			24					
291	Does the work involve removal or addition of shielding?		X					R					
29m	Does the activity involve removal of equipment, ducts, piping, gloveboxes, plenums or tanks from a radioactive area?		×	X	X	о П		R		W.	С	R	
30	Does the activity involve the use of "NEW" processes, equipment or tools used in the work process? If "NO", then proceed to question #31		×										
30a	Will this new tool, process or equipment be used for radioactive materials?		×	×	×	9888	씸	~	220000000000000000000000000000000000000	씸	၁	000000000000000000000000000000000000000	
306	Has the user of this new tool, process, or equipment been trained on its use?		×		×		R		ļ				
31	Will this activity be conducted outside of a building? If "NO", then proceed to question #32.	×											
31a	Is the work being conducted in a soil contamination area?		×					R				၁	
31b	Will the work involve excavation in an area adjacent to an under-building contamination area?		×					R				၁	
31c	Does the activity involve soil probing or well installation?		Х					R				၁	
31d	Will this activity involve excavations, trenching, drilling, geoprobe sampling or any other disturbances of ground (soil, pavement, etc.) to occur?		x	X	$\mathbf{x} \mid \mathbf{x}$	X R	- N	R	~			~	
31e	Will the activity disturb an Individual Hazardous Substance Site (IHSS) and result in potential worker exposure to hazardous substances?		×		X	XR		C				~	
32	Is there a potential for pyrophoric material to be handled, processed, or encountered during the work activity?		×					R					R
33	Will there be a new air emission or a change in the quantity of an existing air emission to the atmosphere (including radionuclide NESHAP)?		x	×								R	
34	Is this work activity being conducted in accordance with a Decommissioning Operations Plan (DOP), a Proposed Action Memorandum (PAM), an Interim Measures/Interim Remedial Action (IM/IRA) document, consent orders, Federal Facility Compliance Agreements (FFCA), or other CERCLA decision document under the Rocky Flats Cleanup Agreement (RFCA)?	×			,	~					Africano e e e e	~	
35	Will this activity install, modify, move, or impact an Underground Storage Tank or Aboveground Storage Tank?		×		×	~		C				Я	
36	Will this activity modify a current RCRA-regulated hazardous waste unit, relocate all or part of a unit, or otherwise impact a unit?		×		×	~	-4					R	
37	Does the activity include closure of a RCRA hazardous waste unit or placing it in a RCRA stable condition?		×		×	~	4					R	
38	Will this activity generate waste? If "NO". then proceed to question #39.		×										

P = Checklist or Permit Required / T = Training Required / M = Medical Monitoring

R = Required SME Involvement & Work Document Concurrence / R¹ = Required for High Planning Level Activities / R² = Required for Uncharacterized Noise Exposure /

R³ = Required when welding is performed to verify conformance in accordance with the Site Quality Assurance Program. /R4 = As required by activity and determined by planning team

C = SME Contacted & Involved in JHA Development w/o mandatory work document concurrence. C¹ = Preliminary review/screen by discipline required.

APPENDIX 3.2 – JOB HAZARA DENTIFICATION TOOL (JHIT)

WCF No.:	No.:	Title/Description: RECONNAISSANCE LEVEL CHARACTERIZATION, REV. 1	4CTERI	ZATIC	N, RE	V. 1					Date: 3/14/00	14/00		
Spec	Specific Work Location:								SME	SME INVOLVEMENT	LVEM	THE		
			Yes	No	Ь	T M	I H&S	ENG ENG	3 RAD	Qual.	CRIT	SN	ENV	田
38a	Will this activity generate PCB ballasts or other TSCA gov PCB bulk product or bulk waste?	ballasts or other TSCA governed waste types, including e?		X		×	O O	*					ر	
38b	Will this activity generate a liquaqueous waste)?	Will this activity generate a liquid sanitary waste (non-radioactive, non-hazardous aqueous waste)?		X		X	၁	<i>5</i> \					~	
38c	Will this activity generate solid sanitary wastes"?	Will this activity generate solid sanitary waste, which falls into the category of "special sanitary wastes"?		×		X	၁	<i>c</i> ,					~	
38d	Will this activity generate solid sanitary waste (excluding)	sanitary waste (excluding prohibited items)?		×		X	С	F \	رہ				~	
38e	Will this activity generate haza	Will this activity generate hazardous, radioactive, or mixed waste?		Х		X	כ	F.	R			_	R	
39	Is the work being conducted in an area covered by a Crit (CAAS) that has been determined to not meet Life Safety system audibility criteria or that has not been tested for L beacons are not visible from or within the affected area?	Is the work being conducted in an area covered by a Criticality Accident Alarm System (CAAS) that has been determined to not meet Life Safety / Disaster Warning (LS/DW) system audibility criteria or that has not been tested for LS/DW audibility and CAAS beacons are not visible from or within the affected area?		×			C	F.\			၁	R		
40	Does this activity impact other facilities outside of the facility performed (i.e.: work on the LS/DW radio feed affects other broadcast music)?	Does this activity impact other facilities outside of the facility where the work is being performed (i.e.: work on the LS/DW radio feed affects other buildings required to broadcast music)?		×			\mathbb{R}^4	, 4 R ⁴	. R ⁴	R ⁴	R⁴	R ⁴	R⁴	\mathbb{R}^4
41	Does the work activity involve generation, transfer or storage of a solutions, residues, or salts that are within the scope of HSP 31.11	Does the work activity involve generation, transfer or storage of any plutonium metals, solutions, residues, or salts that are within the scope of HSP 31.11		X			C	<i>r</i> \	С			R		၁
42	Do any Standing Orders, Operations Orders, or company/faci directives/instructions containing additional health and safety work activity?	Do any Standing Orders, Operations Orders, or company/facility specific directives/instructions containing additional health and safety requirements apply to the work activity?		×			ho	, 4 R ⁴	R ⁴	R⁴	R ⁴	R⁴	R⁴	\mathbb{R}^4
43	Does this activity involve any oth introduce any new hazards? (SH/	Does this activity involve any other hazards not previously identified or could this activity introduce any new hazards? (SHARP EDGES ON METAL SHEETING ON TRAILERS)	Х				R ⁴	.4 R ⁴	R⁴	R ⁴	R⁴	R⁴	\mathbb{R}^4	R⁴

P = Checklist or Permit Required / T = Training Required / M = Medical Monitoring

R = Required SME Involvement & Work Document Concurrence / R¹ = Required for High Planning Level Activities / R² = Required for Uncharacterized Noise Exposure / R³ = Required when welding is performed to verify conformance in accordance with the Site Quality Assurance Program. /R4= As required by activity and determined by planning team C = SME Contacted & Involved in JHA Development w/o mandatory work document concurrence. C¹ = Preliminary review/screen by discipline required.

JOB HAZARD ANALYSIS (Low & Medium Planning)

	WCF No.:	Title/Description: RI	Title/Description: RECONNAISSANCE LEVEL CHARACTERIZATION, REV. 1	, REV. 1 Date: 03/14/00	14/00
	Company/Organization: RMRS	Location:		Department: CHARACTI	Department: CHARACTERIZATION
	SEQUENCE OF BASIC TOR STEPS	DE STEPS	POTENTIAL HAZARD (FROM WALKDOWN & JHTT)	REQUIRED CONTROLS	
······	Radiological Surveys:				
/ושת/ים	1. Use ladder, scaffolding, or aerial lift to access areas above 2 meters. (Most areas are below 2 meters)	lift to access areas ow 2 meters)	Falls	Training:Ladder Safety Awareness or Fall Protection, plus Aerial Lift Training if using aerial lift; OS&IH PM Ch. 39 compliance	tection, plus I PM Ch. 39
•	2. Carry out smears, scans, and surveys.	eys.	Spread of radiological contamination	Training: Radworker 2 or RCT training; RWP, if required Head protection when work is occuring overhead.	, if required ead.
	!!		Falling objects (i.e., radiological instrument)		
	Asbestos inspection and sampling:	•			
	 Visually inspect suspect asbestos-containing material. 	-containing	None.	None.	
_	2. RCT: Carry out pre-sampling survey	vey.	Spread of radiological contamination	Training: Radworker 2 or RCT training; RWP, if required	, if required
	 Collect sample as described in PRO-563-ACPR, "Asbestos Characterization Procedure," utilizing Wondermaker, hole saw, chisel, snips, etc 	to-563-ACPR, re," utilizing ps, etc	Asbestos exposure.	Training: Asbestos Awareness; IH&S determination of additional measures	nation of
	4. RCT: Carry out post-sampling survey	rvey.	Spread of radiological contamination	Training: Radworker 2 or RCT training; RWP, if required	, if required
	5. RCT. Carry out release survey on samples/ sample containers.	samples/ sample		Training: Radworker 2 or RCT training; RWP, if required	, if required
	Team Leader (Name / Signature / Date)		Planner (Name / Signature / Date)	IH&S (Name / Signature / Date)	
	Paul Wojtaszek		Paul Wojtaszek	Brian Maria	ha Altho
	Engineer (Name / Signature / Date)		RadCon (Name / Signature / Date) Rick Roberts 2/15/00	Quality Control (Name/Segnature / Date) Steve Luker	-3/4/00
	Criticality Engineer (Name / Signature / Date)	/ Date)	Nuclear Safety (Name / Signature / Date) N/A	Environmental (Namé / Signature / Date) Marcia Murdock	Mar 03/M
	Fire Protection (Name / Signature / Date) N/A	(a)	Lead Craft / Operator (Name / Signature / Date)	Other (Name /&Ignature / Date)	
	Signatura indicator saturation S	annews of the Toh	Signature indicates concurrence and anniowal of the 10th Hazard Identification Tool and the 10th Hazard Analysis for those programs identified in the IHIT as necessary for	nalvsis for those programs identified in the IHI	The necessary for

Signature indicates concurrence and approval of the Job Hazard Identification Tool and the Job Hazard Analysis for those programs identified in the JHIT as necessary for planning

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APPENDIX 3.4 – JOB HAZARD ANALYSIS (Low & Medium Planning)
Continuation Sheet

WCF/Procedure No.:	Title/Description: RE	Title/Description: RECONNAISSANCE LEVEL CHARACTERIZATION, REV. 1		Date: 3/14/00
Company/Organization	Location:			Page of
SEQUENCE OF BASIC JOB STEPS	OBSTEPS	POTENTIAL HAZARD (FROM WALKDOWN & JHHT)	REQUIRED CONTROLS	NERIOES
Inspection of light fixtures for PCB ballasts	B ballasts			
1. Use ladder as necessary		Falls	Training:Ladder Safety Awareness or Fall Protection; OS&IH PM Ch. 39 compliance	all Protection;
2. Open fixture and visually inspect ballast	ballast	Falling objects	Head and eye protection.	
"Coupon" sampling for isotopic analysis	ınalysis			
1. Use coring drill, sheet metal snips, chisel, or appropriate tool to cut out sample.	s, chisel, or	Penetration of energized circuit, rebar, other unexpected contact	Training: Electrical Safety, as required; Pre-job visual inspection of other side of floor or roof from below; GFCI; grounding: riphyar glouds conflicted drill	Pre-job visual from below; GFCI;
		Penetration too deep Sharp edges	Use of drill stop or other mechanical measure Leather gloves	asure

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